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Schwarze et al.

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(54) **METHOD AND DEVICE FOR
CONTROLLING AN IRRADIATION SYSTEM**

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(71) Applicant: **SLM Solutions Group AG**, Luebeck
(DE)

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(72) Inventors: **Dieter Schwarze**, Luebeck (DE);
Henner Schoeneborn, Luebeck (DE)

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(73) Assignee: **SLM Solutions Group AG**, Luebeck
(DE)

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Primary Examiner — Samuel H Heinrich

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(74) *Attorney, Agent, or Firm* — Taft Stettinius &
Hollister LLP

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(57) **ABSTRACT**

In a method for controlling an irradiation system (20) for use in an apparatus (10) for producing a three-dimensional work piece and comprising a first and a second irradiation unit (22a, 22b) a first irradiation area (18a) is defined on a surface of a carrier (16) adapted to receive a layer of raw material powder. A layer of raw material powder applied onto the carrier (16) in the first irradiation area (18a) is irradiated by the first irradiation unit (22a) of the irradiation system (20), wherein the operation of the first irradiation unit (22a) is controlled in such a manner that the raw material powder is pre-heated. Thereafter the layer of raw material powder applied onto the carrier (16) in the first irradiation area (18a) is irradiated by means of the second irradiation unit (22b) of the irradiation system (20), wherein the operation of the second irradiation unit (22b) is controlled in such a manner that the raw material powder is heated to a temperature which allows sintering and/or melting of the raw material powder in order to generate a layer of the three-dimensional work piece.

15 Claims, 2 Drawing Sheets

